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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Endong Xun

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09/01/2006

LEE & HAYES PLLC

421 W RIVERSIDE AVENUE SUITE 500

SPOKANE, WA 99201

EXAMINER

SERROU, ABDELALI

ART UNIT

PAPER NUMBER

2626

DATE MAILED: 09/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/840,772

Applicant(s)

XUN, ENDONG

Examiner

Abdelali Serrou

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 58-61 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 58-61 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. In response to the office action from 03/07/2006, the applicant has submitted an amendment filed on 06/27/2006. No claims were amended.

Response to Arguments

2. Applicant's arguments filed on 06/27/2006 have been fully considered but they are not persuasive.

As per claim 1, applicant argues that neither Duan nor Adachi teach the feature of a user interface configured to allow a user to select an existing text (Remarks, page 8). The examiner respectfully disagrees and notes that Adachi teaches a user interface configured to allow a user to select an existing text (col. 4, lines 30-36, wherein the user uses the cursor to move the existing sentence "nippon de" to the translated sentence display region).

Applicant argues that the motivation used to combine Duan and Adachi "*The advantage is to provide a processing method and a processor for machine translation, which is capable of obtaining in a short time a complete or a partial translated result for an original sentence input (col. 1, lines 54-58)*" is a variation of the "efficiency" argument, which is too general (Remarks, pages 9-10). The examiner respectfully disagrees and points out that the motivation used meets all the criteria of establishing a *prima facie* case of obviousness by being cited in one of the references used (Adachi, col. 1, lines 54-58), showing a reasonable expectation of success by reducing the time of the translation process, and the combination of reference used discloses all the limitations of the rejected claim.

As per claim 14, applicant argues again that neither Duan nor Adachi teach the feature of a user interface configured to allow a user to select existing text (Remarks, page 11). The examiner disagrees and notes that Adachi teaches a user interface configured to allow a user to select an existing text (col. 4, lines 30-36, wherein the user uses the cursor to move the existing sentence “nippon de” to the translated sentence display region).

Applicant argues that the motivation used “*to make the translation system more versatile*” is a variant of the “efficiency” argument, which is too general. The examiner respectfully disagrees and points out that being more versatile is not a variant of the “efficiency” argument, especially in the field of multilanguage translation, a translation system is more versatile is able to convert between multiple different natural languages, realizing a success of allowing users from different parts of the world to access the same text and understand its meaning through their own language.

As per claims 58 and 61, applicant argues again that neither Duan nor Adachi teach the feature of a user interface configured to allow a user to select existing text (Remarks, pages 13-15), and the motivation used to combine Duan and Adachi is a variation of the “efficiency” argument, which is too general (Remarks, pages 13-15). The examiner disagrees for the same reasons as for the argument of rejected claim 1, above.

Applicant argues that neither Duan nor Adachi teach or suggest the feature of parser comprising a part-of-speech/base noun phrase identification module for tagging individual words with identifiers, and it is not even addressed by the examiner. The examiner respectfully disagrees and points out that, the feature of parser comprising a part-of-

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speech/base noun phrase identification module for tagging individual words with identifiers, is taught by Duan (syntax parse tree, Fig 2a), and it is addressed within the rejection of claim 3.

Therefore, all the combinations of prior art reference mentioned above and the *prima facie* obviousness cases stand valid, and all other dependent claims are rejected for the same reasons as set above.

Thus, claims 1-15, and 58-61 stay rejected for the reasons given in the previous Office Action, which are repeated next.

Claim Rejection 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made

4. Claim 14 is rejected under 35 U.S.C. Claim is rejected under 35 U.S.C 103 (a) as being unpatentable over Duan et al.

Duan et al. in view of Adachi do not explicitly teach a user interface to allows a user to select an existing English text to view a translation text in Chinese. However, the examiner takes Official Notice that it is old and well known in the art to select an existing English language text in view of a second language such as Chinese for a translation of the selected text.

Therefore, it would have been obvious for one of ordinary skill at the time the invention was made to include Chinese as a target language in the Duan et al.'s system to make the translation system more versatile.

5. Claims 1- 3, 5-8, 11 and 58-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duan et al. (U.S 6,778,949, filed on Oct. 18 and issued on Aug. 17, 2004) in view of Adachi et al. (U.S 4,866,670, issued on Sept. 12, 1989).

6. As per claims 1 and 61, Duan et al. teach:

a parser for parsing selected text into individual translation units (relies on a conventional parsing method to build the nodes in a syntax parse tree that builds a parse tree from the leaf nodes to the root node (col. 9, lines 34-39);

a word translation selector for choosing for the translation units an expression in a source language into an output expression in a target language for the translation units (col. 2, lines 16-17); and

a translation generator for translating the candidate word into corresponding words or phrases in the native language that can be presented to the inherent user interface (Figs. 7 and 2a, which represents a generation tree translation.

Duan et al. do not explicitly teach a user interface to allow a user to select an existing text for translation from a source language to a target language.

Adachi et al. in the same field of endeavor teach (command key of a keyboard, col. 2, lines 10-11) and an existing text for translation from a source language to a target language (col.

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3, lines 27-32). Adachi et al. do not explicitly teach selecting an existing text for translation from a source language to a target language. However, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to use the user interface to select the existing text for translation from a source to a target language. The advantage is to provide a processing method and a processor for machine translation, which is capable of obtaining in a short time a complete or a partial translated result for an original sentence input (col. 1, lines 54-58).

7. As per claim 2, Duan et al. teach a morphological analysis module 206 which takes text input 202 and uses a source language dictionary 204 to decompose the words into morphemes by identifying root forms, grammatical categories, thesaurus information, and other lexical features of the words (col. 5, lines 51-55).

8. As per claim 3, Duan et al. teach a part-of-speech/base noun phrase identification module for tagging individual words with identifiers (syntax parse tree, Fig 2a).

9. As per claim 5, Duan et al. teach a phrase extension module (an expansion function, col. 11 lines 35-50) for applying phrase extension rules to individual words.

10. As per claims 6-8, Duan et al. teach a system of a dictionary module for translating the candidate word translations into the corresponding words or phrases, a word dictionary and phrase (multiword) dictionary (col. 6, lines 32-33).

11. As per claim 10, Duan et al. teach a template module (Fig 2a, element 208) that can be used to translate the candidate word translations into the corresponding words or phrase (col. 8, lines 26-33).

12. As per claim 11, Duan et al. teach rules module (col. 5, lines 43-50) that contains multiples rules for translating non-native language words into native language words.

13. As per amended claim 58, Duan et al. teach:

a parser for parsing selected text into individual translation units (col. 9, lines 39-44);

a word translation selector for choosing candidate word translations for the translation units (col. 2, lines 16-17);

a translation generator for translating the candidate word translations into corresponding words or phrases in the native language that can be presented to the user via the user interface (Fig. 7 and Fig. 2a, which represent a generation tree method for use in the natural language translation); and

However, Duan et al. do not explicitly a user interface configured to allow a user to select an existing text in non-native language and view a translation of the selected text in a native language, and wherein the user interface displays text translations adjacent text the user has selected for translation.

Adachi et al., in the same field of endeavor do teach displaying text translation adjacent to the text, the user has selected for translation (Fig. 3, elements 36 and 37).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to incorporate the display feature of Adachi et al. to the system of Duan et al., because this would improve sharply the efficiency of the translation processing, including the edition efficiency (col. 5, lines 16-17).

Furthermore, Adachi et al. teach (command key of a keyboard, col. 2, lines 10-11) and an existing text for translation from a source language to a target language (col. 3, lines 27-32).

Adachi et al. do not explicitly teach selecting an existing text for translation from a source language to a target language. However, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to use the user interface to select the existing text for translation from a source to a target language. The advantage is to provide a processing method and a processor for machine translation, which is capable of obtaining in a short time a complete or a partial translated result for an original sentence input (col. 1, lines 54-58).

14. As per claim 59, Duan et al. teach a morphological analysis module 206 which takes text input 202 and uses a source language dictionary 204 to decompose the words into morphemes by identifying root forms, grammatical categories, thesaurus information, and other lexical features of the words (col. 5, lines 51-55).

15. As per claim 60, Duan et al. teach a phrase extension module (an expansion function, col. 11 lines 35-50) for applying phrase extension rules to individual words.

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16. Claims 4, 12-13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duan et al. in view of Adachi et al., as applied to claim 1, and further in view of McCarley et al. (U.S. Patent 6,092,034 filed on Jul. 27, 1998).

17. As per claims 4 and 12, the Duan et al. in view of Adachi's reference teaches a reading system comprises of all the limitations of claim 3 upon which claim 4 depends.

Duan et al. in view of Adachi do not explicitly teach a statistical model.

McCarley et al. in the same field of endeavor teach a statistical model (col. 7, lines 59-67, and col. 8, lines 1-15).

Therefore, it would have been obvious for one of ordinary skill at the time of invention to combine Duan et al. and Adachi with McCarley et al. by adding the statistical model to the reading system, to disambiguate a source language text and translate it into most likely target language sentences.

18. As per claims 13 and 15, the Duan et al. in view of Adachi teach a reading system comprising of all the limitations of claims 1 and 14 upon which these claims depend.

Duan et al. in view of Adachi do not explicitly teach a browser.

McCarley et al. in the same field of endeavor teach a browser (col. 2, lines 31-35).

Therefore, it would have been obvious for one of ordinary skill at the time of invention to combine Duan et al. and Adachi with McCarley et al. in the reading system to also enable translation of foreign language information on the web.

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19. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Duan et al. in view of Adachi, as applied to claims 1 and 6, in view of Carbonell et al. (U.S. 6,139,201 filed April 15, 1996).

Duan et al. in view of Adachi do not teach an irregular morphology dictionary.

Carbonell et al. in the same field of endeavor teach an irregular morphology dictionary (a listing of irregular morphological forms, col. 17, lines 21-29 and col. 18, lines 10-12).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to have added Carbonell's teaching of irregular morphology dictionary to the Duan et al. and Adachi's method of analyzing and manipulating linguistic structures, so as to have a more versatile system with rules not only for the regular verb morphology (the default rule), but also for the regular types of verb morphology.

Conclusion

20. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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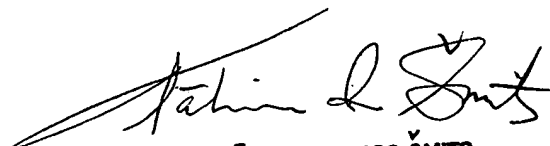
however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abdelali Serrou whose telephone number is 571-272-7638. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Talivaldis I. Smits can be reached on 571-272-7628. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

22. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A. Serrou
08/28/2006



TĀLIVALDIS IVARS ŠMITS
PRIMARY EXAMINER